



MOBILE BLOCK MAKING MACHINES

Machines for the efficient production
of concrete elements

Efficient production of concrete elements

If you have questions, do not hesitate to contact us for consultation: **Tel. +49 (0)8171 6295-0**

Tradition and progress

The first automatic KNAUER mobile block making machine for the production of high-quality concrete product was developed in the 1950s. The working principle remains the same – despite the steady increase of quality and productivity over the years. To manufacture hollow blocks, bricks or landscape and garden elements it is to this day the most economic production method to form these concrete parts with the KNAUER block making machine and then de-mould them on a solid concrete runway for drying.

The machine parts are being manufactured mainly by KNAUER in Germany and otherwise only high-quality vendor parts from well-known German manufacturers are being used. This guarantees a trouble-free and long lasting operation of the machine and ensures easy spare parts supply in most parts of the world if needed.

1 Mixing and batching plant

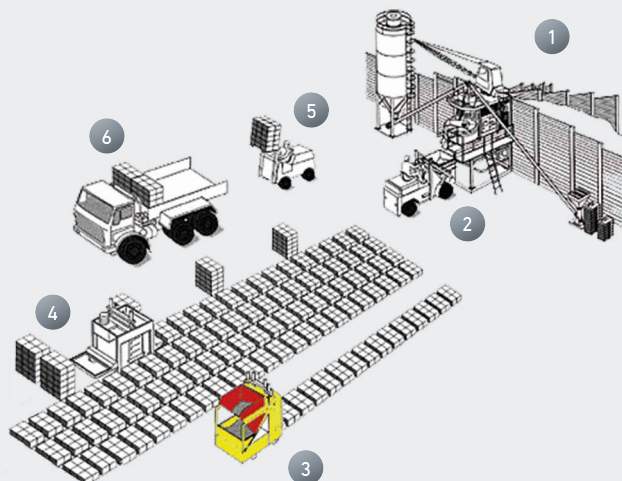
2 Concrete charger

3 Block making machine

4 Automatic stacking and strapping unit

5 Fork lift

6 Truck



Production principle

KNAUER mobile block making machines are suitable for the production of concrete parts inside of halls as well as outside. Just a levelled concrete floor is needed. The size of the concrete floor should be adapted to the amount of blocks which have to be produced per day and the capacity of the mobile block making machine.

A set of concrete elements will be shaped, compacted and finally de-moulded by the KNAUER block making machine. The needed concrete is being transported from the mixing and batching plant to the mobile block making machine. The fabricated elements remain on the floor for curing and the machine moves forward to produce the next set of elements. After the curing (approx. 24 h) the blocks can be stacked on pallets and stored and the cleared area can be used for the next concrete elements.

Expert for small and medium lots

➤ KNAUER X-104



Product examples



The mobile block making machine KNAUER X-104 with a usable mould dimension of 1.040 x 550 mm is the first choice for the semi-automatic production of concrete elements in small and medium quantities. The low price for the machine and the low costs for the moulds - especially when having a wide range of products - lead to minimal production costs per concrete element.

The KNAUER X-104 is available in two different versions: for the production of concrete elements with a height of 175 mm up to 400 mm or from 175 mm up to 600 mm. The possible production range reaches from solid and hollow wall blocks, ceiling and chimney blocks over curb stones up to various garden elements and smaller palisades.

As standard both versions of the machine allow a semi-automatic operation. This means: the hydraulic movements of the ram, the mould and the filling cart have to be executed manually, whereas the pre-vibration and final compaction and the driving of the machine are being executed automatically. The hopper of the KNAUER X-104 is removable and can be used for the transportation of the concrete between the mixing and batching plant and the machine. The operation of the hopper flap is done manually.

FEATURES Description	X 104- 400	X 104- 600
<ul style="list-style-type: none"> • Ram vibrators: For the production of concrete elements with surface texture. Different versions from 13 – 32 kN centrifugal force. 	OPTION	OPTION
<ul style="list-style-type: none"> • Hopper adjustment by spindle: For the support of the filling process of the filling cart. 		OPTION
<ul style="list-style-type: none"> • Hydraulic oil cooler: Oil-air cooler for the production under extreme climatic conditions. Basic equipment for the KNAUER Standard 129 A. 		OPTION

Block making machine for all cases

➤ KNAUER STANDARD



The KNAUER STANDARD is the most diverse usable machine for the semi- and fully automatic operation, with which concrete elements with a height of 175 mm up to 600 mm can be produced. The standard machine can be easily enhanced by different available options.

- With the face mix unit it is possible to produce elements with high quality and high value visual surfaces (e.g. for curb stones)
- The optional vibrating table allows to produce concrete elements with a height below 175 mm in fully automatic operation. Consequently products like paving stones, slabs or grass pavers can be manufactured.

Besides the versatility the KNAUER STANDARD has also several other features like the hydraulic ram/frame lock and a mould gear with 4 pulling columns. These ensure a better dimension accuracy and better reproducibility during the production. The fully automatic KNAUER block making machine can be laid out either for driving on a concrete floor - with a sensor system for driving direction adjustment - or for driving on fixed rails.

Product examples



V = with Option vibrating tables
VF = with Option vibrating tables and face mix unit

FEATURES Description	Standard 129	Standard 129 A
<ul style="list-style-type: none"> • Vulkollan wheels: For a noise reduced and smoother movement of the machine. 	●	●
<ul style="list-style-type: none"> • Ram vibrators: For the production of concrete elements with surface texture. Different versions from 13 – 32 kN centrifugal force. 	OPTION	●
<ul style="list-style-type: none"> • Hopper adjustment by spindle: For the support of the filling process of the filling cart. 	●	●
<ul style="list-style-type: none"> • Hopper vibrator: Support of the filling process of the filling cart. 	OPTION	●
<ul style="list-style-type: none"> • Hydraulic oil cooler: Oil-air cooler for the production under extreme climatic conditions. Basic equipment for the KNAUER Standard 129 A. 	●	●
<ul style="list-style-type: none"> • Face mix unit: Füllwagen zur Herstellung von Betonelementen mit Vorsatzbeton. 	OPTION	OPTION
<ul style="list-style-type: none"> • Vibrating table: For the production of paving stones, tiles and similar concrete elements. 		OPTION
<ul style="list-style-type: none"> • Hopper for concrete transport: Hopper (1200 l) with hydraulically driven hopper flap and openings for forklift forks. 	OPTION	OPTION
<ul style="list-style-type: none"> • Feeding unit: For the feeding of the Styrofoam cores at the production of insulating blocks 	OPTION	OPTION

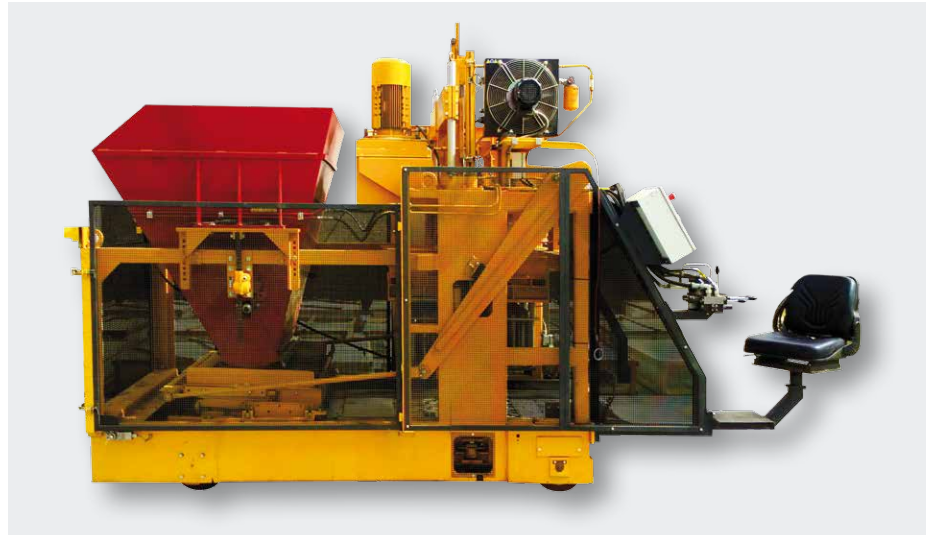
The compact all-rounder

➤ KNAUER COMPACT

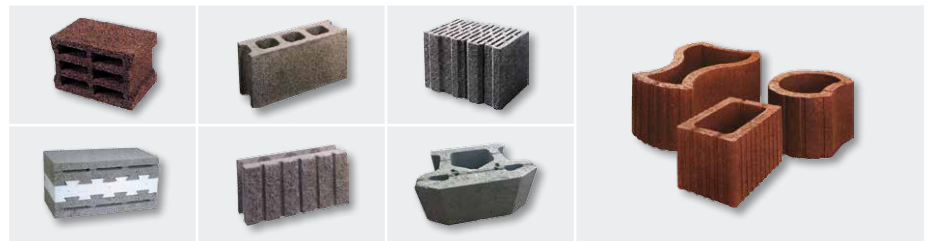
The KNAUER COMPACT produces concrete elements up to a height of 330 mm semi- or fully automatic. Due to the large usable mould dimension at a very compact machine design and therewith pricewise favourable construction, it is possible to produce solid and hollow wall blocks, chimney blocks, planters and similar elements especially economically and in large quantities.

At the semi-automatic version, the machine can be comfortably operated from a driver seat. For the easy and fast transfer of the machine to the next production lane and for the driving direction adjustment a hydraulically extended turning wheel is installed in the front of the machine. The rigid frame and the solid workmanship allow a trouble free production even in rough environment and under extreme climatic conditions.

The KNAUER COMPACT was designed for a single labourer operation; special technical skills are not needed. The KNAUER quick-mould-change mechanism allows making a mould change in a very short time. This allows a diversified production program without long changeover times.



Product examples



FEATURES Description	Compact 129	Compact 129A
<ul style="list-style-type: none"> • Vulkollan wheels: For a noise reduced and smoother movement of the machine. 	●	●
<ul style="list-style-type: none"> • Ram vibrators: For the production of concrete elements with surface texture. Different versions from 13 – 32 kN centrifugal force. 	OPTION	OPTION
<ul style="list-style-type: none"> • Hopper adjustment by spindle: For the support of the filling process of the filling cart. 	●	●
<ul style="list-style-type: none"> • Hopper vibrator: Support of the filling process of the filling cart. 	OPTION	OPTION
<ul style="list-style-type: none"> • Hydraulic oil cooler: Oil-air cooler for the production under extreme climatic conditions. Basic equipment for the KNAUER Standard 129 A. 	●	●
<ul style="list-style-type: none"> • Feeding unit: For the feeding of the Styrofoam cores at the production of insulating blocks 	OPTION	OPTION

Technical Data

* at the production of 20x40x20 cm hollow blocks
 ** at max. use of the mould dimensions

Model	X 104-400	X 104-600	Standard 129	Standard 129 A	Compact 129	Compact 129 A
Features						
Usable mould dimensions, width	1024 mm	1024 mm	1274 mm	1274 mm	1274 mm	1274 mm
Usable mould dimensions, depth	550 mm	550 mm	1000 mm	1000 mm	1000 mm	1000 mm
Block height min.	75 mm	175 mm	175 mm	175 mm	175 mm	175 mm
Block height max.	400 mm	600 mm	600 mm	600 mm	330 mm	330 mm
Hopper volume	510 l	510 l	1200 l	1200 l	1200 l	1200 l
Filling height	2100 mm	2460 mm	2400 mm	2400 mm	2260 mm	2260 mm
Cycle time*	30 - 40 s	30 - 40 s	25 - 35 s	25 - 35 s	25 - 35 s	25 - 35 s
Production capacity*	514 Stk./h	514 Stk./h	1440 Stk./h	1440 Stk./h	1440 Stk./h	1440 Stk./h
Concrete mix**	17,5 m ³ /h	24 m ³ /h	54 m ³ /h	54 m ³ /h	45 m ³ /h	45 m ³ /h
Machine dimensions						
Machine length	1700 mm	1850 mm	3687 mm	3687 mm	3600 mm	3650 mm
Machine width	1700 mm	1700 mm	2240 mm	2240 mm	2220 mm	2220 mm
Machine height retracted	2350 mm	2645 mm	2990 mm	2990 mm	2540 mm	2540 mm
Machine height extracted	3150 mm	3650 mm	3650 mm	3650 mm	3200 mm	3200 mm
Machine weight						
Machine weight (w/o mould)	1,8 t	2,3 t	4,4 t	4,6 t	3,9 t	3,9 t
Vibrator placement						
Mould vibrators	15 kN	30 kN	30 kN	30 kN	30 kN	30 kN
Ram vibrators	13 kN	13 / 24 kN	24 / 32 kN	24 / 32 kN	13 kN	13 kN
Mains connection						
Power consumption	13,5 kW	18,5 kW	22 kW	24 kW	18,5 kW	18,5 kW
Max. current	19,5 A	27 A	32 A	35 A	27 A	27 A

Special machines

▶ PALISADE MACHINE



Besides the machine models mentioned KNAUER ENGINEERING offers high quality special machines, such as the KNAUER Palisade machine (Pic. left) and machines for the production of wood cement blocks or special machines tailored to customer requirements. Further information is available on request!

Product example



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We reserve the right to introduce modifications rendered necessary in the course of further technological development

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